

REMARKS

The Applicants request reconsideration of the rejection.

Claims 1-14 are pending.

Claim 7 has been amended to correct a typographical error.

The Examiner objected to the disclosure as containing the informalities noted on page 2 of the Office Action. The Applicants have reviewed the disclosure and made appropriate corrections to fix spelling and grammatical errors, including those noted by the Examiner.

Claims 1-14 were rejected under 35 U.S.C. 102(e) as being anticipated by either Zampini, U.S. Patent Publication No. 2002/0051928 (Zampini) or Gonsalves, U.S. Patent Publication No. 2002/0182541 (Gonsalves). The Applicants traverse these rejections as follows.

Turning to independent claim 1, the claimed invention is directed to a photomask having, on a glass plate, a shade pattern containing at least nanoparticles and a binder. As set forth in the specification, the glass substrate has a transmittance compared with an opaque substrate, and the shade pattern containing the nanoparticles and the binder has a shading characteristic with respect to exposure light.

Zampini, on the other hand, is believed to be relevant only insofar as it discloses such conventional features as the use of a photoresist used for transferring images to a

substrate, exposing the photoresist through a photomask using a source of activating radiation, and preparing the photomask with opaque areas and transparent areas to effect the exposure. As noted by the Examiner, Zampini also discloses the use of polymeric particles as binders in the photoresist. However, Zampini neither teaches nor suggests a glass substrate, or the shade pattern containing nanoparticles and a binder. Zampini's invention is directed to the photoresist provided on the semiconductor substrate, which is a silicon wafer or a silicon wafer coated with silicon dioxide. Further, Zampini's polymeric particles are not said to have the character of the claimed nanoparticles and binder whereby a shade pattern is provided. Accordingly, Zampini discloses an opaque substrate of a semiconductor device-to-be, on which is formed a resist pattern, with no disclosure of the photomask having a glass plate and a shade pattern as claimed.

Similarly, Gonsalves discloses a photoresist provided on an opaque substrate for the formation of a semiconductor device, but does not show the claimed photomask, or the claimed glass plate and shade pattern containing at least nanoparticles and a binder.

Moreover, the limitations of dependent claims 2-14 have not been addressed in the Office Action. The Applicants submit that each of these claims defines a separately

patentable invention, based on the added limitations in combination with the limitations of independent claim 1.

In addition, the Applicants note that neither Zampini nor Gonsalves has been established as prior art to the foreign priority date of December 28, 2000, to which the present invention claims benefits under 35 U.S.C. 119. To perfect the Applicants' rights under this section, submitted herewith is an accurate translation of the foreign priority document, which fully supports claims 1-14.

The Applicants note the rejection set forth on pages 4-5 with respect to "claims 15-34". However, the present invention contains only claims 1-14; it is believed that the added rejection may have been erroneously copied from a continuation application related to the present application.

In view of the foregoing amendments and remarks, the Applicants request reconsideration of the rejection and allowance of the claims.

Respectfully submitted,

  
Daniel J. Stanger  
Registration No. 32,846  
Attorney for Applicant(s)

MATTINGLY, STANGER & MALUR, P.C.  
1800 Diagonal Rd., Suite 370  
Alexandria, Virginia 22314  
Telephone: (703) 684-1120  
Facsimile: (703) 684-1157  
Date: September 2, 2003

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